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Complementary medicine and the NHS: experiences of integration with UK primary care

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ABSTRACT

Introduction

Complementary and alternative medicine (CAM), often accessed privately, can be integrated with conventional care. Little is known about current integration in the UK National Health Service (NHS). We provide an overview of integrated CAM services accessed from UK primary care for musculoskeletal and mental health conditions, to identify key features and barriers and facilitators to integration.

Methods

Descriptive analysis of integrated services accessed from primary care providing CAM alongside conventional NHS care for musculoskeletal and/or mental health problems.

A purposive sample was identified through personal contacts, social media, literature/internet searches, conferences, and patient/professional organisations. Questionnaires, documentary analysis and stakeholder meetings collected data on the service's history, features, integration, success and sustainability. Data was tabulated.

Results

From 38 sites identified, twenty sites were selected. Acupuncture and homeopathy were most common, followed by massage, osteopathy and mindfulness. GPs were often instrumental initiating services. NHS staff enthusiasm facilitated integration, as did an NHS setting, patient/public support, and being adjunctive to an NHS service. The main barriers to integration were funding, negative perceptions of CAM from the clinicians, funders and lobby groups, and local NHS staff attitudes/lack of knowledge. Reduced funding was often why services closed.

Conclusions

Various models for integrating CAM with UK primary care were identified. Social prescribing and NHS/patient co-funded CAM may be potentially sustainable models for future integration. Lack of funding and negative perceptions of CAM remain the primary challenge to integration. Evaluating effectiveness and cost-effectiveness of integrated services is vital to ensure sustainability.

Keywords

Complementary therapies; integrative medicine; primary health care; general practice; comorbidity

INTRODUCTION

Complementary and alternative medicine (CAM) is healthcare “not considered to be a part of mainstream medical care”[1]. A significant number of patients in Europe[2] and around a quarter of the UK population [3-5] use CAM each year. Excluding over-the-counter/self-care CAM, practitioner-only approaches were used by between 10% and 12% of the UK population in a year (data from 2001 and 2005)[5, 6].

Patient demand for holistic care may be the main organisational driver for the integration of CAM with conventional Western medicine (integrated medicine; IM). In the UK, most care is publicly funded through the NHS, whereas CAM is more usually accessed through private funding [7]. Luff and colleagues describe two models of IM[8]: the ‘additive’ model where CAM supplements and addresses the gaps in conventional care, similar to Wiese and colleagues’ ‘selective incorporation’ (the incorporation of some elements of CAM into conventional care, which remains the dominant model) [9]; and the ‘transformative’ model, where elements of both approaches are combined more closely. In the transformative model, the aim is usually to “make use of all appropriate therapeutic and lifestyle approaches, healthcare professionals and disciplines to achieve optimal health and healing” [10]. This model is more common in the USA than the UK – see Vohra et al [11]. In the UK the ‘additive’ model is more likely, including conventional medical practitioners practising CAM, CAM practitioners delivering treatments on NHS premises [12-14], or referral from NHS to CAM, similar to social prescribing [15].

In the UK, primary care is commonly the first point of contact with the NHS. Here we use it to mean general practice. Primary care may be the most suitable setting for integration of CAM, due to its similar holistic approach, emphasis on self-care, and strong therapeutic relationships [16]. Integrating CAM into primary care may improve its accessibility, impact and adherence [17] and address safety issues e.g. drug interactions[7]. Also CAM may be able to reduce NHS costs [18].

There are no up-to-date data on availability of CAM accessed through UK primary care (e.g. how many patients have accessed CAM through a GP, or provided by a primary care practitioner). 2001 estimates suggest almost half of English general practices were providing some access to CAM, an increase of 38% since 1995[14]. This was either through GPs and nurses providing the CAM (most commonly acupuncture), independent CAM practitioners working in the GP surgery (most commonly manipulative therapies) or NHS referrals to external CAM providers [14]. Overall, 42% of these CAM services were fully or partially paid for by the patient[14]. In 2003, 43% of NHS Primary Care Trusts offered integrated CAM services accessed through primary care and provided free/partly free at point of delivery, mainly acupuncture, osteopathy, homeopathy, therapeutic massage, chiropractic and nutritional therapy [13]. Almost 80% of these IM primary care services received some form of NHS funding and in most of the others patients made small contributions [13]. A systematic review of surveys of UK physicians – not just primary care - estimated that just over 20% ‘used’ CAM in their practice within the previous week (recommendations, referrals, provision of treatment or self-administration); 39% had referred, 46% recommended [19]. Acupuncture was most popular, followed by homeopathy and relaxation [19].

As part of a larger scoping study to inform an RCT protocol for an IM approach for MSK-MH comorbidity, this paper reports on exemplars of integrated services currently or recently running in the UK.

METHOD

The aim of the study was to provide an overview of integrated medicine services provided in or accessed via UK primary care, identify their key features and barriers and facilitators to integration.

Specific research questions were:

- What are the features of current integrated CAM provision in the UK NHS, particularly funding, patient pathways, the CAM provided and conditions treated?
- Which models of integration seem to work well in terms of acceptability in the NHS, perceived success, sustainability/longevity of service, patient access?
- What are the facilitators and barriers to integration?
- To provide ideas of IM models for future implementation, as part of the wider project, to inform discussions with other stakeholders regarding their feasibility and acceptability

Potential sites were identified via: colleagues in the project team, steering group, and PPI group; organisations representing NHS professionals/CAM practitioners/particular health conditions e.g. Royal College of General Practitioners, Fibromyalgia Action UK and the Complementary and Natural Healthcare Council; Google searches; literature review (a previous phase of the scoping study); social media – Research Gate, Twitter, websites; and presentation at two CAM conferences. Sites were invited by email from one of the project team.

Sites were eligible for inclusion if they provided an integrated approach (CAM alongside conventional NHS treatment), were based in or accessed via primary care (e.g. GP referral), and used an integrated approach for musculoskeletal and/or mental health condition(s). We purposively selected sites based on funding source(s) (NHS/charity/patient/reduced fee), location and model of integration, as well as currently operational/ceased services. We aimed to study a breadth of sites but resource constraints meant we would only study 10 in-depth ('primary' sites). The remaining sites in the purposive sample were included but were designated 'secondary' sites, which were not investigated in such depth and were not visited. Data collection took place in 2015/2016 and was updated using an email enquiry in early 2018.

For primary sites, data to answer the questions in Box 1 were collected using a structured questionnaire, documentary analysis, and meetings, which were triangulated [20]. The questionnaire was completed by AL and a site informant.

Documents for analysis (no patient records were reviewed) were provided by the site, including:

- websites
- reports (annual reports, reports to funders)
- proposals/funding bids/business cases/strategies
- meeting agendas and minutes
- service evaluations or audits
- research papers
- news items
- advertisements
- patient information documents

Documents were carefully analysed to extract factual data and themes 'between the lines' (discussed and confirmed with participants).

Meetings (not formal research interviews)[20] focused on confirming/clarifying data from the questionnaire and documentary analysis; questions were developed iteratively for each site, based

on the features identified in Box 1. Meetings (one per site) were face-to-face (preferably) or by phone and audio-recorded for our records but not transcribed or formally analysed. Key 'informants' attended (managers, directors, clinical NHS/CAM practitioners), with email/phone conversations with other staff members (former staff/practitioners, patient representatives, associated charity staff, receptionists, administrators).

Data collection for secondary sites aimed to answer similar questions to primary sites, but in less detail, and used simpler methods e.g. collating information from websites, with follow-up phone conversations if possible.

For each primary and secondary site, AL wrote a report, confirmed by informants (as data verification), including:

- a summary overview, why the service started, history, setting, success
- description of the model of care, including funding and patient pathways
- effectiveness and cost-effectiveness (where data available)
- projected future of the service
- barriers and facilitators of integration

A simple descriptive frequency analysis was used for questionnaire data. Service locations were added to a map of the UK.

Analyses compared data collected using all three methods within and between sites[21] , using tabulation loosely based on Framework analysis [22] , with table column headings based on the themes in Box 1 and emergent themes. Nvivo software was used to facilitate this tabulation. The relevant timings of when each service started and stopped/changed and any related events/factors were noted.

The main contact at each site gave written permission for the site's inclusion, with the option for their service's data to be anonymous. All sites (except two which had closed) saw the draft paper and were happy for their service to be named. All data were confidential and kept on secure, password-protected computer drives and in locked filing cabinets.

Box 1: Topics and questions (primary sites)

History of service development

- How and why was the IM/CAM service set up?

What does the service look like?

- NHS context locally
- How is CAM provided, funded, delivered?
- What courses of treatment are offered and what do they consist of?
- What are the patient pathways – referral etc?
- What is the relationship with the patient's GP?
- How many patients are treated and what are their demographics?
- Who provides the CAM?
- Who pays for the CAM?
- What patients/conditions are treated?

How does integration work?

- How do NHS/CAM staff work together?
- What are/were the barriers to integration?
- What helped in integration?
- Who are the CAM practitioners accountable to and regulated by?
- Do patients input into the service design or success?

Success and sustainability

- How effective and cost-effective is the service? Are outcome data collected routinely?
- What about patient satisfaction?
- How successful is the service now?
- Is the service sustainable? In the current NHS? What does the future hold?
- If the service has ceased (or stopped running for any period of time), when, why and how did it cease? Are there any plans to revive it?

RESULTS

38 potential sites were identified. Twelve sites were invited to be primary sites, one declined (too busy), and one agreed but subsequently withdrew. Twelve further sites were invited to be secondary sites, two of which did not respond to our request. A total of twenty sites, 10 primary and 10 secondary, were therefore included and reported on below— see **Error! Reference source not found..** Figure 1 gives a map of the sites (also available at: goo.gl/S7kRH8) Between one and nine informants attended the meetings at sites, usually between one and three.

Service aims and origins

Service aims (sites could provide multiple aims), were mostly focussed on improving health and wellbeing (10 sites). Four aimed to improve access to CAM and two to reduce health inequalities. Three aimed to address particular limitations of an NHS service and three to reduce use of NHS services.

Service origins were as follows (some sites fit multiple categories). Five services started as a pilot project leading to a commissioned service. Four were former NHS homeopathic hospitals. Three were instigated by individual GPs/consultants. Three were set up specifically as an integrated

service, based on a 'vision'. Three were part of government initiatives. Two started when the NHS service they were part of moved premises. Two started with NHS innovation funding. One was part of a research study. Many services cited particular individuals as instrumental in their initiation: eight services mentioned GPs or groups of GPs, three mentioned other NHS practitioners, two CAM practitioners and two individuals at the funding body.

CAM provided

Error! Reference source not found. shows the CAM offered. Seven services offered group-based CAM (tai chi, yoga, meditation, acupuncture, mindfulness, pain management). Other approaches included: individualised treatment (five services); self-management/patient education (five services); packages of care (three services), and support materials/signposting to local classes (three services). At three sites, CAM was part of a broader social and wellbeing service.

Six sites had significant input from patients regarding service delivery and design.

Sites had from one (three sites) to 40 CAM practitioners; mean of 11 per site, most commonly private, self-employed practitioners. At four sites, most/all were also NHS clinicians, often CAM/IM trained. Glasgow CIC particularly emphasised their 'integrative care practitioners', all dually trained with some trained in IM in the USA.

NHS-based governance (seven sites) included: NHS trained and regulated practitioners; General Medical Council-regulated homeopaths; International Standards Organisation certification; Care Quality Commission registration. Seven sites mentioned non-NHS based governance.

Integration models and funding

We chose sites with diverse models and funding sources. GP referral for a specific CAM was the main access route, followed by self-referral. Services received referrals from between one and 15 general practices. At three sites, GPs referred to the broader service e.g. social prescribing[15], physiotherapy or pain clinic. Three sites accepted other NHS professional' referrals and one (York Learning mindfulness) accepted non-NHS referrals (e.g. charities or local community services). Communication with GPs was usually a letter following treatment; four sites discussed cases with the GP and three communicated with GPs regarding safety. Brighton (integrated site) had weekly integrated clinical meetings, Culm Valley did not.

Specific NHS funding included:

- commissioning group (CCG) funding, either as an additional service (6 sites), funding a charity to provide the service (1 site), or via 'prior approval' (case by case) (1 site)
- CAM provided by an NHS service (physiotherapy) (2 sites)
- fundholding/practice-based commissioning (2 sites)
- pilot/innovation NHS funding (3 sites)
- GP practice income (3 sites)
- Public Health England (1 site)

Five sites offered subsidised/reduced-fee CAM, (through charitable funding, as a pilot or reduced room rent for practitioners). Reduced fees ranged from £12 to £35/session; three sites adjusted for income. At Phoenix Surgery, approximately a quarter of patients paid the subsidised fee. YHLB

(Yoga for Healthy Lower Backs) now offers courses co-funded by the patient and the GP surgery/YHLB.

Patients

Few sites provided accurate numbers of service users, most data were informant's perception. Estimated patient numbers ranged from 13/month to 300/week (NIHP, at the peak of its service). Most sites treated multiple conditions, commonly mental health (anxiety, depression, low mood), long term conditions (all except one), musculoskeletal conditions/chronic pain (back pain, shoulder pain, knee pain, arthritis), fibromyalgia, and chronic fatigue.

Data collected at sites

Sites were collecting some data for audit or research purposes, including: audits (eight sites); research projects (six sites), including effectiveness studies (RCTs, uncontrolled, observational, cohort, feasibility); routine data collection (three sites), including attendance, outcomes, patient experience, qualitative data, and GP appointments; literature reviews and qualitative studies. RLHIM was the most research-active. Effectiveness evidence was mainly from audits or evaluations. Eight sites believed that their service offered value for money or was cost-effective, e.g. due to reduced use of other services or time off work. YHLB has been shown to offer positive return on investment from a wider societal perspective [23]. Fourteen sites claimed high patient satisfaction.

Barriers and facilitators to integration

Sites felt the following promoted integration:

- NHS staff enthusiasm (nine sites; one as the most important factor)
- Setting of the service, including NHS setting (eight sites)
- Patient/public support (seven sites)
- Providing an adjunct to the NHS service (mutual benefit between services) (six sites)
- Positive results of treatment (five sites)
- Low cost/free service (four sites)
- Staff teamwork and supportive relationships between professionals (four sites)
- High quality practitioner training and regulation (three sites)
- Treating certain conditions (especially those with limited conventional treatment options) (three sites)

Participants' perceived barriers to integration (in order of frequency cited):

- Funding/cost (for two sites it was the only barrier)
- General negative perceptions of CAM, from individual clinicians, the media, funders, and specific lobby groups (mentioned by 6 sites; main barrier for one)
- NHS staff at the site unwilling to integrate (main barrier for two sites)
- Lack of space
- Lack of access to NHS patient records
- Lack of evidence

Markers of success

When asked whether they perceived their service as 'successful' and 'sustainable' (likely to continue to attract funding and patients), services reported the following measures of success and sustainability. The data for each service for these criteria are presented in table 4.

- how long the service had been running
- number of patients treated
- awards won
- service expansion (starting new services, new sites, increasing popularity)
- staff satisfaction and retention
- interviewee's perception of the future of the service
- if it faced significant challenges e.g. reduced funding, staff shortages
- other factors, including positive feedback from government ministers or clinicians and ability to meet patient demand.

We have no robust quantitative data but we observed themes/patterns between the service characteristics (e.g. model of integration, CAM provided, funding) and the markers of success in Table 4. Sites which offered a wider range of CAM tended to have patient/public/professional support, win awards, and have high staff satisfaction. Those offering one/two CAM had ceased or were facing substantial challenges. Three out of the four services which were expanding provided yoga, and five out of seven of those which had ceased or faced challenges provided homeopathy or acupuncture.

All three social prescribing services (Brighton, Culm Valley and Rotherham) had moderate/large numbers of patients and positive futures; YHLB has recently started a social prescribing service. Both of the New Deal for Community services (Impact and Get Well UK) had ceased due to funding cuts, as had services using a single CAM within a GP practice (Plas Menai and Andrew Ward) – although a third (RF therapies) was continuing.

None of the services where the patient paid a fee (full or part) had ceased, and Culm Valley and YHLB cited their reduced fee models as successful.

From our initial data, the former homeopathic hospitals and the integrated health centres reported positive futures, however, some of these sites have since reported increasing difficulty obtaining NHS funding.

Future of services

As reported in Table 4, four services felt that their model was sustainable. The main anticipated challenge a service's future was lack of funding (five services), also increasing NHS privatisation, lack of interest from commissioners, NICE guidelines removing CAM, and staff retirement.

For ceased services, funding ending or being withdrawn was the main reason (five services), as well as staff shortages or lack of space.

The former homeopathic hospitals all reported being fairly sustainable, as did both integrated health centres (Brighton Health and Wellbeing Centre and Culm Valley).

DISCUSSION

Summary

We were able to describe 20 services where CAM is integrated into the NHS via primary care, using a variety of models and with varying degrees of perceived success. Acupuncture and homeopathy were the most commonly provided CAM, followed by massage, osteopathy and mindfulness. Audit and evaluation were commonly undertaken, and some sites participated in research studies. GPs

were often instrumental in service initiation and NHS staff enthusiasm was seen to facilitate integration. The following factors may be influential in perceived success, sustainability and acceptability of a service: offering a wide range of CAM (and providing yoga may be associated with service expansion); using a social prescribing model; and producing relevant evidence (to try and document effectiveness and cost-effectiveness). The main barriers to integration were funding, negative perceptions of CAM, and negative NHS staff attitudes or lack of knowledge. Reduction or termination of funding was often the reason for service closure.

Comparison with existing literature

The most commonly provided therapies (acupuncture, homeopathy, massage, osteopathy) are those generally used by the public [5, 6] and delivered in NHS settings in 2004 [13]. Mindfulness was also common but not included in previous surveys [5, 6]. However, these surveys are out of date. The popularity of mindfulness in our study may reflect its rapid increase in availability since 2002 [24] (particularly mindfulness based stress reduction, and mindfulness based cognitive therapy which is included in UK clinical guidelines for Depression (NICE guideline CG90)).

Some services aimed to reduce inequity in access to CAM, particularly if located in deprived areas. In the UK there is socioeconomic inequality in accessing CAM[25], as it is more commonly used by those of higher socioeconomic status (income, education and social grade) [6, 26, 27]. A minority of patients were accessing NHS-funded or subsidised/low-cost CAM, which appears to facilitate integration.

Evidence of effectiveness was cited as important in attracting funding and thus the success of services, although there was little direct proof of this. In many services, pilot data and evaluation led to further implementation of CAM services. This may reflect English primary care commissioners' emphasis/preference for local evaluations rather than formal research [28]. There has been suggestion that patient demand may also be more important in driving CAM provision in the NHS than evidence[29-31].

Other sources suggest that evidence to support cost-effectiveness, provided by only four of our sites, may be the most important factor for NHS decision-making on service provision [32]. In addition, reliable funding is an important facilitator of integrating CAM, and uncertain funding threatens services' long-term future [11, 31]. Funding is an increasingly critical issue in the UK given ever tighter restrictions on NHS spending [33].

The importance of enthusiastic individuals or 'champions' with a 'vision' in initiating services has been identified in the UK [31] and the USA [11]. The USA is considered further ahead than the UK in developing integrative medical services, which are usually based on a collaborative approach [11]. The Australian experience also suggests successful IM services are based on a shared vision and open-minded culture [30]. Research confirms that successful integration requires adaptation at an organisational level, as well as by individual clinicians [34]. Luff and Thomas suggest that having CAM practitioners on site in the GP surgery can facilitate such structural integration of CAM [31].

Attitudes towards CAM, both professional and public, appear to continue to impact the integration of CAM into the NHS. Academic doctors' views on CAM vary widely, from enthusiastic to sceptical, with sceptical or uncertain the dominant view [35]. However, although out of date, only 6% of primary care professionals were against any integration of CAM [36]. It may be that attitudes depend on the type of CAM or the health condition being treated - 59% of GPs support the provision of acupuncture by the NHS [37] and GPs' tend to be positive about CAM for conditions with limited treatment options e.g. musculoskeletal[36], chronic conditions [38] and chronic pain[36].

Implications for research

The main implication for research is that, although many services did collect data through audit/evaluation, there is a need for more robust and high-quality empirical data [39]. Until there is further research, particularly demonstrating cost effectiveness, it will be difficult for integrated services to be maintained or for new ones to be set up.

A national survey of NHS CAM services would be valuable to obtain a broader and more generalisable picture, and more in-depth case studies to explore some of the issues raised. Research to identify factors associated with success of integrated services would be particularly valuable.

Implications for practice

As concluded by Luff and Thomas back in 2000, we can offer little consensus as to the ideal model of integration. Some of the IM services we found in UK primary care are similar to the 'integrative medicine' model identified by Wiese et al [9] and usually more common in the USA. These provide a range of treatments and are based on a holistic approach and individual patient need [9, 40]. Notable examples were Brighton, where joint weekly meetings between NHS and CAM practitioners were held, and Glasgow, where some practitioners were trained in integrative medicine in Arizona (<https://integrativemedicine.arizona.edu/education/fellowship/index.html>.) We found some suggestion that services offering a wide range of CAM may be less likely to cease than those offering one or two CAM. However, providing a collaborative, integrative service is challenging and requires major organisational redesign. Another model identified was the 'incorporation' model, e.g. GP referral to CAM, which may be more feasible but does risk subordinating and side-lining the CAM, with loss of autonomy and ethos for the CAM [9]. Selective incorporation could use a social prescribing model, which was reported as a sustainable model in three of our sites, including Rotherham [41] and also in Bromley-by-Bow [42]. Social prescribing has some preliminary evidence, and might be a vehicle for integrating CAM into the NHS [43]. Integrated personal commissioning/personal health budgets (where patients 'micro-commission' their own care) offer another potential mechanism for publicly funded CAM [44-46].

GPs may be embracing an increasingly wider role in supporting patients' health and wellbeing, as suggested in the NHS/General Practice Forward Views [47, 48], which could encompass CAM-based approaches. However, GP workload might be too high to attempt a fully integrative approach [49]. A more holistic GP approach and integrating CAM practitioners into NHS settings could potentially increase patient choice and reduce GP workload through greater patient self-management, and by diversifying the workforce, as recommended in the Forward View [47]. GPs in integrated services in the UK have reported that integrating CAM can relieve their workload, particularly for patients they find difficult to treat [31]— which often includes MSK conditions and depression [50].

Given that none of the part-patient-funded CAM services had ceased, co-payment for CAM by NHS/charity and patient may be an option for integration (if evidence of effectiveness and cost-effectiveness is available). Co-payment would clearly need to consider ability to pay (e.g. a sliding scale). Although likely to appeal to an increasingly cash-strapped NHS, co-payment is a controversial issue in the NHS, as it challenges the NHS's fundamental principles. The King's Fund recently rejected this idea[46].

Attitudes towards CAM, from both individual NHS staff, lobby groups and the public, appear important in the success of existing integrated CAM services, and GP enthusiasm may be crucial in setting up a new IM service. Successful IM will require better communication and understanding between CAM practitioners and their GP colleagues.

There is no UK health policy regarding the provision of CAM although there are recommendations for its use in some NICE guidelines [51]. National guidelines on the process of integrating CAM may be needed to promote a more standardised approach to integration [31].

Strengths and limitations

This study aimed to provide an overview of a wide range of models of IM and as such used less in-depth data collection and analysis methods than a formal case study approach. Instead we relied heavily on the views of staff and service providers— often only one or two per site —, who may have overemphasised the positive aspects of their service. However, documentary analysis of wider sources, where available, did provide triangulation and a more rounded picture.

Relying mainly on qualitative data, , and using ‘meetings’ rather than formal research interviews with stakeholders, we were unable to draw any firm conclusions regarding the success of a service, or factors which may be associated with success.

Conclusion

CAM is currently integrated with UK primary care in a wide variety of models. Social prescribing and NHS/patient co-funded CAM may be potentially sustainable models for future integration. Lack of funding and negative perceptions of CAM remain the primary challenge to integration. Collection of evaluation, research and cost data from these services is vital for the future of integrative medicine.

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Ethical approval

This work was part of a larger study which was approved by the University of Bristol Faculty of Medicine and Dentistry Research Ethics Committee (FREC) on 3rd July 2015, reference 21603. NHS management permission was provided by the relevant NHS organisations for each of the NHS sites.

Conflict of interest

None to declare

Authors

All research done by the authors

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References

1. The House of Lords, *What is Complementary and Alternative Medicine? Growing Use of CAM in the United Kingdom* Science and Technology - Sixth Report, 2000.
2. Eardley, S., et al., *A systematic literature review of complementary and alternative medicine prevalence in EU*. *Forschende Komplementärmedizin* (2006), 2012. **19 Suppl 2**: p. 18-28.
3. Thomas, K.J., J.P. Nicholl, and P. Coleman, *Use and expenditure on complementary medicine in England: a population based survey*. *Complementary Therapies in Medicine*, 2001. **9**(1): p. 2-11.
4. Ernst, E. and A. White, *The BBC survey of complementary medicine use in the UK*. *Complementary Therapies in Medicine*, 2000. **8**(1): p. 32-36.
5. Hunt, K.J., et al., *Complementary and alternative medicine use in England: results from a national survey*. *International Journal of Clinical Practice*, 2010. **64**(11): p. 1496-502.
6. Thomas, K. and P. Coleman, *Use of complementary or alternative medicine in a general population in Great Britain. Results from the National Omnibus survey*. *Journal of public health* (Oxford, England), 2004. **26**(2): p. 152-157.
7. Chung, V.C.H., et al., *Organizational Determinants of Interprofessional Collaboration in Integrative Health Care: Systematic Review of Qualitative Studies*. *PLoS ONE*, 2012. **7**(11): p. e50022.
8. Luff, D.T., Kate, *Models of Complementary Therapy Provision in Primary Care*, in *Medical care research unit*. 1999, Medical Care Research Unit, University of Sheffield,: Regent Court, 30 Regent Street, Sheffield, S1 4DA.
9. Wiese, M., C. Oster, and J. Pincombe, *Understanding the emerging relationship between complementary medicine and mainstream health care: A review of the literature*. *Health* (London, England : 1997), 2010. **14**(3): p. 326-342.

10. US Consortium of Academic Health Centers of Integrative Medicine. *Introduction*. 2016; Available from: <https://www.imconsortium.org/about/about-us.cfm>.
11. Vohra, S., et al., *Integrating complementary and alternative medicine into academic medical centers: Experience and perceptions of nine leading centers in North America*. BMC Health Services Research, 2005. **5**: p. 78-78.
12. Wye, L., *Mainstreaming complementary therapies into primary care: the role of evidence, 'ideal' service design and delivery and alterations in clinical practice*. 2007, University of Bristol. p. 330.
13. Wilkinson, J., D. Peters, and J. Donaldson, *Clinical Governance for Complementary and Alternative Medicine in Primary Care*. Final Report to the Department of Health and the King's Fund, 2004.
14. Thomas, K., P. Coleman, and J. Nicholl, *Trends in access to complementary or alternative medicines via primary care in England: 1995–2001 Results from a follow-up national survey*. Family Practice, 2003. **20**(5): p. 575-577.
15. Templeman, K. and A. Robinson, *Integrative medicine models in contemporary primary health care*. Complementary Therapies in Medicine, 2011. **19**(2): p. 84-92.
16. Hwang, E.S. and H.J. Lee, *Inhibitory effects of lycopene on the adhesion, invasion, and migration of SK-Hep1 human hepatoma cells*. Exp.Biol.Med (Maywood.), 2006. **231**(3): p. 322-327.
17. Demarzo, M.M.M.-M., Jesus; Cuijpers, Pim; Zabaleta-del-Olmo, Edurne; Mahtani, Kamal R; Vellinga, Akke; Vicines, Caterina; Lopez-del-Hoyo, Yolanda; GarciaCampayo, Javier, *The Efficacy of Mindfulness-Based Interventions in Primary Care: A Meta Analytic Review*. Annals of Family Medicine, 2015. **13**(6): p. 573-82.
18. Wye, L., A. Shaw, and D. Sharp, *Designing a 'NHS friendly' complementary therapy service: A qualitative case study*. BMC Health Services Research, 2008. **8**(1): p. 173.
19. Posadzki, P., A. Alotaibi, and E. Ernst, *Prevalence of use of complementary and alternative medicine (CAM) by physicians in the UK: a systematic review of surveys*. Clinical medicine (London, England), 2012. **12**(6): p. 505-12.
20. Parthasarathy, B. *The ethnographic case study approach*. 2008 [cited 2015 24/04/2015]; Available from: <http://www.globalimpactstudy.org/2008/07/the-ethnographic-case-study-approach/>.
21. Stake, R.E., *The art of case study research*. 1995, California: Sage Publications.
22. Ritchie, J., L. Spencer, and W. O'Connor, *Carrying out Qualitative Analysis*, in *Qualitative Research Practice: A Guide for Social Science Students and Researchers*, J. Ritchie and J. Lewis, Editors. 2003, Sage Publications Ltd.: London. p. 219-262.
23. Public Health England, *Return on Investment of Interventions for the Prevention and Treatment of Musculoskeletal Conditions*. 2017, York Health Economic Consortium.
24. Cullen, M., *Mindfulness-Based Interventions: An Emerging Phenomenon*. Mindfulness, 2011. **2**(3): p. 186-193.
25. Burke, A., R.L. Nahin, and B.J. Stussman, *Limited Health Knowledge as a Reason for Non-Use of Four Common Complementary Health Practices*. PLoS ONE, 2015. **10**(6): p. e0129336.
26. Reid, R., et al., *Complementary medicine use by the Australian population: a critical mixed studies systematic review of utilisation, perceptions and factors associated with use*. BMC Complementary and Alternative Medicine, 2016. **16**(1): p. 1-23.
27. Bishop, F.L. and G.T. Lewith, *Who Uses CAM? A Narrative Review of Demographic Characteristics and Health Factors Associated with CAM Use*. Evidence-based complementary and alternative medicine : eCAM, 2010. **7**(1): p. 11-28.
28. Wye, L., et al., *Evidence based policy making and the 'art' of commissioning – how English healthcare commissioners access and use information and academic research in 'real life' decision-making: an empirical qualitative study*. BMC Health Services Research, 2015. **15**: p. 430.

29. Sheppard, M.K., *The paradox of non-evidence based, publicly funded complementary alternative medicine in the English National Health Service: An explanation*. Health Policy, 2015. **119**(10): p. 1375-1381.
30. Hunter, J., et al., *The challenges of establishing an integrative medicine primary care clinic in Sydney, Australia*. J Altern Complement Med, 2012. **18**(11): p. 1008-13.
31. Luff, D. and K.J. Thomas, *Sustaining complementary therapy provision in primary care: lessons from existing services*. Complementary Therapies in Medicine, 2000. **8**(3): p. 173-179.
32. Dakin, H., et al., *The Influence of Cost-Effectiveness and Other Factors on Nice Decisions*. Health Economics, 2015. **24**(10): p. 1256-1271.
33. NHS England. *Funding and efficiency*. 2018; Available from: <https://www.england.nhs.uk/five-year-forward-view/next-steps-on-the-nhs-five-year-forward-view/funding-and-efficiency/>.
34. Hamilton, J.L., et al., *Complementary and alternative medicine in US family medicine practices: a pilot qualitative study*. Alternative therapies in health and medicine, 2008. **14**(3): p. 22-7.
35. Maha, N. and A. Shaw, *Academic doctors' views of complementary and alternative medicine (CAM) and its role within the NHS: an exploratory qualitative study*. BMC Complementary and Alternative Medicine, 2007. **7**(1): p. 17.
36. van Haselen, R.A., et al., *Providing Complementary and Alternative Medicine in primary care: the primary care workers' perspective*. Complementary Therapies in Medicine, 2004. **12**(1): p. 6-16.
37. Lipman, L., J. Dale, and H. MacPherson, *Attitudes of GPs towards the provision of acupuncture on the NHS*. Complementary Therapies in Medicine, 2003. **11**(2): p. 110-114.
38. Jarvis, A., et al., *General practitioners' beliefs about the clinical utility of complementary and alternative medicine*. Primary Health Care Research and Development, 2015. **16**(03): p. 246-253.
39. Wye, L., D. Sharp, and A. Shaw, *The impact of NHS based primary care complementary therapy services on health outcomes and NHS costs: a review of service audits and evaluations*. BMC Complementary and Alternative Medicine, 2009. **9**(1): p. 5.
40. Hu, X.-Y., et al., *Defining integrative medicine in narrative and systematic reviews: A suggested checklist for reporting*. European Journal of Integrative Medicine, 2015. **7**(1): p. 76-84.
41. Dayson, C., et al. *The Rotherham Social Prescribing Service for People with Long-Term Health Conditions Annual Evaluation Report*. 2016; Available from: https://www.shu.ac.uk/research/cresr/sites/shu.ac.uk/files/rotherham-social-prescribing-annual-eval-report-2016_7.pdf.
42. Bromley by Bow Centre. *Social Prescriber*. ND; Available from: <http://www.bbbbc.org.uk/social-prescriber>.
43. Polley, M., et al., *A review of the evidence assessing impact of social prescribing on healthcare demand and cost implications*. 2017.
44. NHS England. *Integrated Personal Commissioning (IPC) Programme*. 2015; Available from: <https://www.england.nhs.uk/commissioning/ipc/>.
45. Rogers, J., *Personal health budgets: A new way of accessing complementary therapies?* Complementary Therapies in Clinical Practice, 2011. **17**(2): p. 76-80.
46. Barker, K., *A new settlement for health and social care*. 2014, The King's Fund.
47. NHS England. *General Practice Forward View*. 2016 [14/07/2016]; Available from: <https://www.england.nhs.uk/wp-content/uploads/2016/04/gpfv.pdf>.
48. NHS England. *Five Year Forward View*. 2014; Available from: <https://www.england.nhs.uk/ourwork/futurenhs/nhs-five-year-forward-view-web-version/>.
49. Dale, J., et al., *Retaining the general practitioner workforce in England: what matters to GPs? A cross-sectional study*. BMC Family Practice, 2015. **16**(1): p. 140.

50. Fisher, P., et al., *Effectiveness gaps: a new concept for evaluating health service and research needs applied to complementary and alternative medicine*. Journal of Alternative & Complementary Medicine, 2004. **10**(4): p. 627-32.
51. Lorenc, A., J. Leach, and N. Robinson, *Clinical guidelines in the UK: Do they mention Complementary and alternative medicine (CAM) – Are CAM professional bodies aware?* European Journal of Integrative Medicine, 2014. **6**(2): p. 164-175.